Alcoholism

The Chronological Background Leading to California's Present Program

WENDELL R. LIPSCOMB, M.D., M.P.H., Berkeley

THE HISTORICAL PROMINENCE of alcoholism has been recorded in the literature of every known civilization from antiquity. Philosophers, scientists, religious leaders and writers have observed and discussed man's relation to alcohol—that inevitable by-product of man's mastery of agriculture¹⁹—in terms variously laudatory and derogatory.

Biblical quotations (71 in all) relating to the use of alcoholic beverages are favored sources for argumentation by both "wets" and "drys," as are quotations from Shakespeare.

The Babylonian Code of Hammurabi, the oldest known system of codified law (c. 2225 B.C.), devotes several sections to regulation of the sale of alcoholic beverages in an attempt to control intemperate use of such beverages.³²

The Chinese, whose traditional lack of alcoholic problems has provoked much study^{3,20,21} even into modern times,⁴ established and repealed laws against the manufacture, sale and drinking of wine no less than 41 times in the 2,500 years beginning about 1100 B.C.²⁹

Many accurate and currently applicable descriptions of both the acute and chronic stages of alcoholism can be found in the writings of the Graeco-Roman era. Pliny the Elder (23-79 A.D.) wrote of the acute stage, and Seneca (5 B.C.-65 A.D.) in describing chronic alcoholism wrote: "The results are pallor, quivering of the muscles soaked in wine, and an emaciation due to indigestion and not to hunger. Hence the uncertain and tottering gait, and constant stumbling as if they were actually drunk; hence the swelling of the skin and distension of the belly, which has taken more than it can hold; hence the jaundiced and discoloured complexion . . . and the nerves dulled and without feeling or, on the other hand, constantly twitching. Why need I speak of the giddiness or the disturbance of vision and hearing, and the insidious pains in the head?"33 The Dark and Medieval Ages, with their many conflicting beliefs and practices, donated to the future a rich, if The chain of circumstances (and its welders) leading to California's broadly programmed attack upon alcoholism and its related complications is described.

confusing, mythology about alcohol, strong remnants of which persist even today.

National and international temperance movements and organizations for almost two centuries have been recognized forces in concerted attempts to deal with alcoholism. Similarly, insightful scientists, clinicians, lay bodies and individuals have constantly applied thought and effort to the solution of the problem.

A British physician, Doctor Thomas Trotter, in a thesis submitted to the University of Edinburgh in 1778, described drunkenness as a "disease produced by a remote cause"; and as early as 1830 in this country the Connecticut Medical Society emphasized the need for special hospitals for the treatment of this "disease."

In 1885 the first meeting of the International Congress on Alcoholism was held in Antwerp.²⁵

The League of Nations in 1926 suggested that alcoholism study be part of the League program, and encouraged enforcement of Article 22 of the League Covenant, which dealt with control of importation of alcohol into mandated colonies.¹⁰

Again in 1928, at the 13th Session of the League of Nations Health Committee, an active program on alcoholism was considered, but an evident lack of scientific and medical knowledge worked against the establishment of such a program.⁴⁷

The United Nations, successor to the League of Nations, established its international health arm, the World Health Organization (WHO) as a functioning body in 1948. When the Expert Committee on Mental Health undertook the question of alcoholism in 1949, it recommended that the problems be studied by a special subcommittee.⁵⁵

This Expert Committee on Alcohol and Alcoholism convened in first session in December, 1950,

[•] An ancient problem is receiving modern attention in California. In this paper, the author briefly reviews the historical background that has made possible newer attitudes and study approaches to the problem of alcoholism.

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From the Division of Preventive Medical Services, Bureau of Chronic Diseases, State of California, Department of Public Health.

Dr. Lipscomb is Supervisor, Alcoholism Studies Project, Department of Public Health.

and submitted as its basic recommendation: "... that WHO should take all steps within its power to stimulate public-health services, to undertake work on this problem and should be prepared to provide advisory, educational and other services on this subject to such national health authorities as request them." 56

The alcoholism subcommittee classified the drug alcohol as "intermediate between addiction-producing and habit-forming drugs," and defined alcoholics as: ". . . those excessive drinkers whose dependence upon alcohol has attained such a degree that it shows a noticeable mental disturbance or an interference with their bodily and mental health, their interpersonal relations, and their smooth social and economic functioning; or who show the prodromal signs of such developments. They therefore require treatment." 58

This committee also proposed the following simple broad classification of drinkers:

- 1. Irregular symptomatic excessive.
- 2. Habitual symptomatic excessive.
- 3. Addictive.⁵⁸

Alcoholics are persons of the latter two groups. Physical complications can occur in any of the three classes, but mental complications of any type only in classes 2 and 3.

Today, among the nations of the world there are at least eight which have passed national legislation for the control of alcoholism and the treatment and rehabilitation of alcoholics. They are Sweden, Denmark, Finland, Norway, Switzerland, The Netherlands, Belgium and more recently France.⁵³ Of these, Sweden* has been the leader and has, since 1913, had special laws providing for the treatment of alcoholics.²³

Repeatedly in such legislation the social nature of this illness has been emphasized.⁵⁴

In general, the social and medical illnesses deriving from the intemperate use of alcohol have been the object of observation, study and countless efforts at control in both ancient and recent times. The accumulation of knowledge from private and public efforts has led to the present international attack on the problem—an attack that has its operations grounded in the sciences, basic and applied, physical and social.

It is obvious that alcoholism has long been viewed as both a clinical and a social issue. Karl M. Bowman, one of the pioneers in the scientific investigation of alcoholism in America, wrote in 1942:

"Every medical issue is, or ought to be, a social issue, too; and some social issues, regarded strictly as such, ought to become medical issues. The latter type of social issue usually becomes suitable for effective social handling only after medicine has adopted it, but only long after. This is due to the fact that when medicine first accepts a social issue as a medical one, the social effects tend to cling to it and temporarily to becloud the purely medical integration of the problem. Medicine can eliminate these encumbrances only gradually. When this has been accomplished, however, the quondam social issue emerges as a rigid medical problem. This stage, too, is not the most productive, for at this time society does not recognize the issue as its own but tends to accept the narrow view that it belongs in the restricted sphere of the medical scientist. Finally, the medical development of the problem reaches a stage when medicine can afford to drop the role of exclusiveness with respect to it. Medical science itself now reintegrates the desirable social aspects into the problem, and it becomes manifest in its correct proportions as a medico-social issue. Society is then ready to tackle it with the greatest promise of success. This process is operative with respect to the alcohol problem."13

ALCOHOLISM IN THE UNITED STATES

From the beginning, American interest in alcoholics and in the entire problem of alcoholism has been sustained not only by voluntary efforts of individuals and organized groups, but also by the early colonial instructions in the founding charters. For example, the royal instructions to colonial Virginia of November, 1606, mandate punishment of . . . all manner of excess through drunkenesse or otherwise, and all idle loytering and vagrant persons" as the designated governing body of the colony should see fit.2 The varying attitudes of the more puritanical northeastern colonies are too well known to require documentation, although in recent years researchers have called attention to the fact that heavy use of alcohol was a widely accepted practice of pioneer times.

Parallel with Europe, this country entered the Eighteenth Century debate begun by Thomas Trotter as to whether habitual drunkenness was a disease or a form of moral insanity. Temperance and antitemperance forces aligned themselves, the former reaching their greatest numerical strength in the middle of the Nineteenth Century. The Washingtonian Movement of the 1840's best exemplifies the rapid growth of the temperance movement during that period.²⁶

The early suggestion (1830) of the Connecticut

^{*}Sweden, in its original law of 1913, defined alcoholics in terms of behavioral defects, e.g., people who in their use of alcoholic beverages were unable to care for themselves, or those who disrupted the life of a neighbor.

Medical Society that the state set up special hospitals for alcoholics was mentioned earlier; however, it was not until 1854 that an extraordinary man, Joseph Turner, succeeded in securing the passage of "An Act to Incorporate the United States Inebriate Asylum for the Reformation of the Destitute Inebriate" by the State Legislature of New York.³⁴ Understandably, this precocious project was ill-fated; yet, it served to arouse public interest to the extent that within 20 years after Turner's death (1889), more than 50 hospitals for inebriates were founded in America and Europe.³⁵

The temperance feeling found political expression in the National Prohibition Act of 1920, the Eighteenth Amendment to the Constitution, which, after a thirteen-year trial, was repealed in 1933 by the Twenty-first Amendment.

One of the major enlightenments to come out of this experiment was that scientific inquiry into the role of alcohol in society was the sine qua non for understanding, handling and preventing further extension of the problem. To this end a group of educators and scientists in 1937 formed the Research Council on Problems of Alcohol.²⁸

The Research Council was incorporated in 1938 and within six months became officially associated with the American Association for the Advancement of Science. The purpose of the Council was defined as follows: "The alcohol problem has become one of the major perplexities of our civilization. On top of all the intrinsic difficulties of the situation, there have been superimposed emotional and political elements that have produced still further complications. It has become evident that nothing can be accomplished by the application of main force. If we are to find a way out, it can only be through the development of a complete factual basis on which can be built an intelligent, effective plan of action. The main and primary purpose of the Research Council on the Problems of Alcohol is to ascertain the facts: the secondary objective is to make these facts available to the public in such a way that they will do the most good."28

The scientific committee of the Council, under the chairmanship of Karl M. Bowman* and executive directorship of E. M. Jellinek, immediately initiated a complete classificatory survey of world literature dealing with alcohol and inebriety. The substance of the study was published in several volumes by the Council.¹³

This work of collecting, abstracting and classify-

ing the literature dealing with alcohol and alcoholism was taken over in 1940 by the Yale University Laboratory of Applied Physiology in New Haven, Connecticut, where the staff of the newly founded Quarterly Journal of Studies on Alcohol could preserve and expand it.15

This work resulted in the Classified Abstract Archive of the Alcohol Literature, a codified collection of some 6,000 abstracts, which, through the cooperation of WHO, has been duplicated and established in depositories in many countries§ of the world.15

The Yale University Laboratory of Applied Physiology, which materially aided the Council in its initial efforts, has a long and outstanding record of a multidisciplinary approach to the problem of alcoholism that began in 1930 under the direction of Howard W. Haggard. It has stimulated research on metabolic, physiological, medical, sociological and psychological aspects of alcoholism, establishing itself as a national authority on investigations relating to this problem area.

Upon the death, in 1949, of the Research Council on Problems of Alcohol-"Too much overhead, with too little money for research," said Anton J. Carlson, the council's president—the National Research Council took over the various uncompleted projects still under wav.1

The pioneering work and continuing influence of the Yale group[‡] have been, for the past 20 years, a directing force in every phase of alcoholism research, treatment and rehabilitation both nationally and internationally.

No discussion of alcoholism in the United States is complete without mention of the unique, voluntary alcoholic-treatment group, Alcoholics Anonymous, which originated in 1935.36 This organization with 150,000 members in this country,²⁴ now has a counterpart in every country that is attacking the problem of alcoholism. Alcoholics Anonymous is recognized by the medical profession as a worthy adjunct to medical treatment for those alcoholics who can accept AA's traditions and credos.6

The acceptance of alcoholism as an illness by

^{*}Director (now emeritus), Langley Porter Clinic, San Francisco, California; Professor of Psychiatry, University of California Medical School, San Francisco, California.

[†]Co-founder of the Quarterly Journal of Studies on Alcohol, official organ of Yale Laboratory of Applied Physiology—currently and since 1952 WHO Consultant, Mental Health Section, Expert Committee on Alcoholics. Alcohol and Alcoholism

[§]By 1952 depositories were designated by regional offices of WHO to the following countries: Belgium, Denmark, Finland, France, Germany, Ireland, Norway, Sweden, Switzerland, Yugoslavia, Argentina, Brazil, Canada, Chile, Uruguay, Paraguay. A number of depositories have been established in the United States by public or private agencies within the states.¹⁶

within the states.¹⁶

†The Yale University workers have been instrumental in establishing and supporting:

1. The Quarterly Journal of Studies on Alcohol (1940).

2. Alcoholism Treatment Digest (a bimonthly publication).

3. Classified Abstract Archive of Alcohol Literature (1941).

4. Yale Clinic Plan (1944).

5. National Committee for Education on Alcoholism (independent of the Yale group since 1949) (1944).

6. Yale Center of Alcohol Studies—1945 (separate from the Laboratory of Applied Physiology).

7. Yale Summer School of Alcohol Studies (1942).

8. Summer School of Alcohol Studies in other states (1949).

9. Consultative and advisory services to all branches of federal, state and local government.

society and by organized medicine has been a slow process. Today, despite the tremendous work of the past two decades, many persons of this and other countries consider alcoholism a social blight to be handled by the correctional authorities, or, at best, to be hidden from public view by mental hospitals. In 1954, Doctor Anthony Zappala, Director of the Alcoholic Rehabilitation Division, District of Columbia Department of Public Health, wrote: "The medical definition, which is gradually finding its way into the law, describes the alcoholic as a person who has lost control of the practice of drinking alcoholic beverages to an extent that his interpersonal, family, or community relationships have become seriously threatened or disturbed.³⁷

At the state level the modern attack on alcoholism began with the formal establishment of a program by Connecticut in 1945. By 1952, 38 (now 40) states and Washington, D. C., had passed legislation recognizing alcoholism as a public health problem and created boards or other official agencies to establish programs for dealing with the problem. The National States' Conference on Alcoholism, an association of administrators of state alcoholic programs, was created in 1950. Its membership comprises representatives from most states having programs for the study and treatment of alcoholism.

Growing federal interest led to the following statement⁹ by the Public Health Service in 1951:

"The U. S. Public Health Service's interest in alcoholism stems from its long-standing concern with the basic problems of addiction. The present consideration of alcoholism as a public health problem involves a coordinated program in which the National Institute of Mental Health serves as the focal point of the definitive approach to the problem as a whole. Two other units of the service are currently concerned with particular aspects of the problem, namely, the Division of Occupational Health of the Bureau of States' Services and the Division of Hospitals in the Bureau of Medical Services. The divisions just mentioned collaborate with the National Institute of Mental Health with respect to research and other matters of mutual interest.

"The basic public health approach to alcoholism emphasizes the need for detection and treatment of early stages, and the development of long-range programs for prevention through education and coordinated community efforts. The National Institute of Mental Health, through its community-services activities, endeavors to make clear the symptomatic nature of alcoholism, to emphasize the importance of general medical and mental health

services in arresting it, to foster more adequate methods of rehabilitation, and to apply more effective measures of prevention. The approach to these objectives involves a wide base of cooperative participation of agencies working at local levels.

"The Public Health Service is prepared to support research of a basic or applied nature in the field of alcoholism. Grants for such research may be made to universities, hospitals, laboratories, other public or private institutions and to individuals in accordance with the provisions of the National Mental Health Act."

ALCOHOLISM IN CALIFORNIA

Although the law establishing California's Alcoholic Rehabilitation Commission (Chapter 22, Statutes of 1954, Extraordinary Session) was not passed until 1954, there is no shortage of historical evidence to attest the traditional interest of the State in alcoholism as both a medical and social problem. Section 3 of the five sections detailing the duties of the State's new Board of Health (now called the Department of Public Health) in 1870 reads: "It shall be the duty of the board, and they are hereby instructed, to examine into and report what, in their best judgment, is the effect of the use of intoxicating liquor, as a beverage, upon the industry, prosperity, happiness, health and lives of the citizens of the State; also what legislation, if any, is necessary in the premises."38

Thomas M. Logan, M.D., first executive secretary to the Board of Health, in the first Biennial Report (1870-1871) of the Board,³⁹ wrote of Section 3:

"In the full knowledge of the fact of the pecuniary loss to the State and to his family, by the idleness of the inebriate and the cost to the public treasury for his ultimate care and support in the induced impaired health, and in the last stage of destitution, to say nothing of the expense of measures of repression and punishment called for by breaches of the peace and crimes committed by the intemperate, we think the question is one which particularly commends itself alike to the statesman and the philanthropist.

"Without, however, attempting to arbitrate between two doctrinal extremes prevailing in regard to the dietetic usages of alcohol or vinous drinks, but simply looking at things as we find them, and as in the case of any other form of physical evil afflicting a fellow-creature, either standing by itself or implicating, at the same time, the moral and intellectual faculties, we should prefer to limit, if possible, its extent or diffusion by the encouragement of those preventive measures brought about by individual will, aided by and at the same time

^{*}Now the North American Association of Alcoholism Programs.

aiding voluntary association with others, rather than by legislative enactment."

This comment of three-quarters of a century ago was strangely prophetic, for the entire history of activities relating to the amelioration of the alcoholism problem in this State is one of voluntary efforts. The recent creation of a State agency to deal with "... all phases of the treatment and rehabilitation of alcoholics ..." was a response to these long-standing, voluntary efforts combined with more recent public-group requests that the State Legislature seek an answer to the alcoholic problem. 42

Voluntary partisan groups, as well as those interested only in treatment and rehabilitation, such as Alcoholics Anonymous, formed a very vigorous and vocal pressure to which a positive governmental response was inevitable. The traditional view of the alcoholic as a public nuisance and weak-willed wrong-doer whose activities warranted only imprisonment is gradually giving way to the modern concept of alcoholism as an illness.

In 1937, the year the Research Council on Problems of Alcohol was formed, the State of California made provision for the commitment of "dipsomaniacs, inebriates, and stimulant addicts" to State mental hospitals.43 This action, designed to house and treat California's "problem drinkers," quickly demonstrated that at most those committed represented a very tiny portion of the alcoholics needing treatment. It was found that alcoholic admissions to mental hospitals soon comprised one-fifth of all admissions.²² Yale estimates of the extent of California's problem in 1947 indicated one quarter of a million intemperate drinkers, and some sixty thousand chronic alcoholics (those requiring immediate remedial attention), with California rating second in the nation in per capita consumption of alcoholic beverages.7,12 The most recent application of the Jellinek Estimation Formula⁵⁷ for the measurement of the prevalence of alcoholism in the United States indicates California as the state with the highest rate of alcoholism,17 and San Francisco as the city with the proportionally highest number of alcoholics in the entire nation.18

The 1948 Emmet Daly study⁵ of San Francisco's handling of the "drunk problem" served to highlight the problem and led to the establishment of the San Francisco Adult Guidance Center of the Health Department of the City and County. ¹⁴ Similarly, in 1949 the Sheriff's Office of Alameda County instituted an alcoholic-treatment clinic in the Santa Rita Rehabilitation Center at Pleasanton. ⁴⁹

The Governor's Conference on Mental Health in 1949 devoted an entire section to alcoholism and recommended the designation of an agency to carry out the responsibilities of the state in the field of alcoholism.⁴⁴

Public health officials reemphasized the extent of alcoholism as a public health problem,^{27,52} and the California Medical Association appointed a special committee to survey the problem¹¹ and define the role of the profession in dealing with it. In 1950 the Board of Supervisors of Los Angeles County engaged consultants from the Yale University Center on Alcohol Studies, Laboratory of Applied Physiology, to study the problem of alcoholism in Los Angeles County.³⁰ In 1952 the Yale workers began a study of alcoholics at the Santa Rita Rehabilitation Center, and, as in the past, a state-wide institute on the problems of alcoholism was held.^{50,51}

The Weinberger Committee report and recommendations⁴² on alcoholic beverage control and the 1954 Legislative Auditor's report on alcoholism⁴⁶ paved the way for the establishment of the State Alcoholic Rehabilitation Commission under Assembly Bill 9.

The Commission was authorized and directed by the Legislature to carry out the following responsibilities: (1) Investigate and study (a) all phases of the treatment and rehabilitation of alcoholics; and, (b) other factors necessary to the reduction and prevention of chronic alcoholism and other excessive uses of alcohol; (2) engage in all phases of the treatment and rehabilitation of alcoholics; and, (3) submit its first report to the Governor and the Legislature before March 1, 1957, and a final report and recommendations to the Governor and the Legislature before March 1959. The basic purposes and objectives of the Alcoholic Rehabilitation Commission were to plan, organize and establish a comprehensive program comprising three major activities: (1) Treatment and rehabilitation of alcoholics; (2) research into the causes and effects of alcoholism as well as the treatment of alcoholics; and, (3) the establishment of a state, national and international public information reservoir on the subject of alcoholism. The first act of the newly formed Commission was to call in consultants from the Yale Center of Alcohol Studies to study and to advise the Commission on a program for attack on alcoholism. In its report to the Commission, the Yale group emphasized the need for a balanced program of research, treatment, rehabilitation, and especially evaluation of existing treatment programs.31

The vigorous manner in which the Commission set about carrying out its responsibilities for its uniquely comprehensive program can be quickly seen by the following table of program expenditures for the years 1954 through 1957:

State Alcoholic Rehabilitation Commission Expenditures⁴⁵ (1954-1957)

Expended 1954-55	Expended 1955-56	Estimated Expenditures 1956-57
Administration, informa- tion and staff projects:	•	
Salaries \$16,614	\$ 32,657	\$ 53,520
Operating expense 11,052	11,316	28,913
Equipment 3,437	242	2,717
Consultants 5,683	2,323	1,000
Nature of alcoholism:		
Research projects	18,000	50,000
Extent and effects of alcoholism:		
Causation survey	*******	50,000
Control of alcoholism:		
Research clinic,		
UCLA	50,000	50,000
Evaluation studies 11,583	40,000	40,000
Hospital pilot treat-	,	,
ment		15,000
Community pilot clinics:		, , , , ,
Alameda County		34,000
Los Angeles		35,000
Sacramento		9,000
San Diego		25,000
San Francisco	40.199	50,000
San Jose		16,000
Stockton		21,000
Total expenditures \$48,369	\$ 194,737	\$481,150

It will be seen that from the beginning of the Commission's program, funds were allocated and spent for evaluation studies of existing alcoholic-treatment facilities (State Department of Public Health); for augmentation of the budget of an existing alcoholictreatment facility (San Francisco Adult Guidance Center, a voluntary outpatient clinic operated by the Health Department of the City and County of San Francisco); and for the establishment of a research clinic (University of California at Los Angeles) for study of treatment methods. Later, budgetary appropriations were made for expansions of evaluation programs; for the initiation of causation studies; for medical research into the metabolism of alcohol, the neuro-endocrine system, the relation of alcohol and the liver, precise determination of blood alcohol measurements; for studies of the impact of alcoholism on the family unit and of the effect of alcoholism on law enforcement; for a survey by the Commission executive staff as to the extent of instruction in California's public schools on alcohol and its effect on the body; and for a greatly expanded system of funds for the establishment of community pilot clinics.

Some unique features in the establishment of the community alcoholic rehabilitation clinics were that over and beyond the primary purpose of rehabilitating as many alcoholics as reasonably possible, the clinics, by contract, must carry on the following activities: (1) Evaluation of patient status (diagnosis); (2) treatment and rehabilitation; (3) information—public and professional; (4) community organization and coordination; and, most importantly (5) follow-up (evaluation of the treatment program). A full account of the Commission's activities for the period cited is given in the 1957 Interim Report to the State Legislature.⁴⁵

In the 1957 session of the State Legislature, a new alcoholic rehabilitation law was passed which abolished the Commission and created within the State Department of Public Health an Alcoholic Rehabilitation Division.⁴¹ The responsibilities of the Health Department, like those of its predecessor, include treatment, rehabilitation and investigation.

The placement of a total alcoholic rehabilitation program in the Health Department indicates the state's recognition of alcoholism as a public health problem and responsibility. This action insures continuing support for treatment, rehabilitation and investigation with prevention as the ultimate goal.

2151 Berkeley Way, Berkeley 4.

REFERENCES

- 1. American Foundation: Medical Research: A Midcentury Survey, Little Brown and Co., Boston, Mass., 1955, 2.518
- 2. Baird, E. G.: The alcohol problem and the law: Part III: The formative years in Virginia: Early statutory and case law relating to alcoholic beverages, Quart J. Stud. Alc., 9:80. June 1948.
- 3. Bales, R. F.: Cultural differences in rates of alcoholism, Quart. J. Stud. Alc., 6:480-499, March 1946.
- 4. Barnett, M. L.: Alcoholism in the Cantonese in New York City: An Anthropological Study from Etiology of Chronic Alcoholism, Diethelm, Oskar, Editor, C. C. Thomas, Springfield, Ill., 1955.
- 5. Daly, Emmet: Report and recommendation on the arrest, detention and treatment of alcoholics in the city of San Francisco: A memorandum prepared by the special assistant district attorney of the city and county of San Francisco, Sept., 1948.
- 6. Feldman, D. J., and Zucker, H. D.: Present-day medical management of alcoholism, J.A.M.A., Vol. 153, Nov. 7, 1953.
- 7. Haggard, H. W., and Jellinek, E. M.: Alcohol Explored, Doubleday, Doran, Garden City, New York, 1947.
- 8. Henderson, R. M., and Straus, R.: Alcoholism, 1941-1951: A survey of activities in research, education and therapy; programs on alcoholism in U. S., 1952, Quart. J. Stud. Alc., 13:472, Sept. 1952.
 - 9. Ibid., p. 484.
- 10. Hercod, R.: The alcohol problem and the League of Nations, British J. of Inebriety, Vol. 24, Jan. 1927.
- 11. Irish, C. W., and others: Alcoholism, Calif. Med., Vol. 72, Jan. 1950.
- 12. Jellinek, E. M.: Recent trends in alcoholism and in alcohol consumption, Quart. J. Stud. Alc., 8:11, June 1947.
- 13. Jellinek, E. M., editor: National Research Council on Problems of Chronic Alcoholism: Effects of Alcohol on the Individual, Vol. 1—Alcohol Addiction and Chronic Alcoholism, Yale University Press, New Haven, Conn., 1942.

- 14. Johnston, McClain: Adult Guidance Center, San Francisco, Pub. Health Rep., Vol. 68, Jan.-June 1953.
- 15. Keller, M., and Efron, V.: The classified abstract archive of the alcohol literature: Part I, description of the archive, Quart. J. Stud. Alc., 14:263-264, June 1953.
 - 16. Ibid., p. 265, footnote No. 5.
- 17. Keller, M., and Efron, V.: The prevalence of alcoholism, Quart. J. Stud. Alc., 16:634, Dec. 1955.
- 18. Keller, M., and Efron, V.: Alcoholism in the big cities of the U. S., Quart. J. Stud. Alc., 17:68, March 1956.
- 19. Kroeber, A. L.: Anthropology, Harcourt, Brace and Co., Inc., New York, 1948, p. 554.
- 20. LaBarre, W.: Some observations on character structure in the Orient. Part II, The Chinese, Psychiatry, Vol. 9, Nov. 1946.
- 21. Lin, Tsung-yi: A study of the incidence of mental disorder in Chinese and other cultures, Psychiatry, Vol. 16, 1953.
- 22. Lucia, E.: Alcoholism in California, Calif. Dept. of Public Health, Chronic Disease Service, Sept. 1948.
- 23. Lundquist, G.: Alkoholismus als medizinisches und soziales problem (Alcoholism as a medical and social problem), Nervenarzi, 22:373-375, 1951.
- 24. Mann, M.: The power of preventive action—an address given by the executive secretary of the National Committee of Alcoholism at the 5th annual meeting of the Western New York Committee for Education on Alcoholism, Inc., distributed by Nat. Comm. of Alc., New York, Jan. 1954.
- 25. Mann, M., and Lolli, G.: Report of the twenty-third international congress on alcoholism, Quart. J. Stud. Alc., 9:416, Dec. 1948.
- 26. Maxwell, M. A.: The Washingtonian movement, Quart. J. Stud. Alc., 11:410-451, Sept. 1950.
- 27. Merrill, M.: Recent trends in public health, Calif. Med., 72:22-25, January 1950.
- 28. Moore, H. H.: Activities of the research council on problems of alcohol, Quart. J. Stud. Alc., 1:104-107, June 1940.
- 29. Moore, M.: Chinese wine—some notes on its social use, Quart. J. Stud. Alc., 9:276, Sept. 1948.
- 30. McCarthy, R. G.: Alcoholism in Los Angeles County—a survey report, Yale University, New Haven, Conn., 1950.
- 31. McCarthy, R., and Archibald, D.: Report of the Yale consultants to the California State Alcoholic Rehabilitation Commission, Yale Center of Alcohol Studies, New Haven, Conn., Dec. 22, 1954.
- 32. McKinlay, A. P.: Ancient experience with intoxicating drinks: Nonclassical peoples, Quart. J. Stud. Alc., 9:398-399, Dec. 1948.
- 33. Rolleston, J. D.: Alcoholism in classical antiquity. British J. of Inebriety, 24:106, 1927.
- 34. Rypins, S.: Joseph Turner and the first inebriate asylum, Quart. J. Stud. Alc., 10:127-128, June 1949.
 - 35. Ibid., p. 133.

- 36. W., Bill: Basic concepts of Alcoholics Anonymous, New York State J. of Med., 44:1805-1808, Aug. 15, 1944.
- 37. Zappala, A., and Ketchum, F. S.: Toward sensible rehabilitation of the alcoholic, Pub. Health Rep., 69:1187, Dec. 1954.
- 38. State Board of Health of California: First Biennial Report of the Permanent Secretary, Sacramento, 1870-1871, p. 15.
 - 39. Ibid., p. 4.
- 40. Assembly Bill 9 (AB 9): Special Session, State of California Legislature, 1954, Sacramento, California.
- 41. Assembly Bill 3117 (AB 3117): Legislative Session, State of California, 1957.
- 42. Alcoholic Beverage Control: Report of Sub-Committee on Alcoholic Beverage Control to the 1954 Special Session of the State of California Legislature: A Sub-Committee of the Joint Interim Committee on Governmental Reorganization. 1953.
- 43. California Welfare and Institutions Code, Sections 5400-5406, 1937.
- 44. The Governor's Conference on Mental Health: Preliminary Report of Section Findings and Recommendations, Sacramento, California, March 3-4, 1949.
- 45. Interim Report of the State of California Alcoholic Rehabilitation Commission, 1957, p. 146.
- 46. Survey of Status of Research and Programs Concerned with Alcoholism: Report by the California Legislative Auditor, Sept. 1954.
- 47. Minutes of the 13th Session, League of Nations, Health Committee, Geneva, Switzerland, p. 16.
- 48. Introduction to Selected Papers Delivered at the Sixth Annual Meeting of National States' Conference on Alcoholism, Miami Beach, Fla., Oct. 30-Nov. 2, 1955.
- 49. General Report, Office of the Sheriff, County of Alameda, Santa Rita Rehabilitation Center, Alcoholic Clinic, May 1954.
- 50. Third Session of the Institute of Scientific Studies for the Prevention of Alcoholism under auspices of the National Committee for the Prevention of Alcoholism, Loma Linda, Calif., Aug. 4-15, 1952.
- 51. Institute on Alcoholic Studies in San Francisco, California, presented by the Department of Institutes, University Extension, University of California, Oct. 23, 1947.
- 52. Editorial: Alcoholism, A Public Health Problem? Amer. J. Public Health, Vol. 37, 1947.
- 53. European Seminar and Lecture Course on Alcoholism, WHO Regional Office for Europe, Palais des Nations, Geneva, Copenhagen, Denmark, Oct. 22-Nov. 3, 1951.
- 54. World Health Organization, International Digest of Health Legislation, 6:715-732, 1955.
 - 55. Wld. Hlth. Org. techn. Rep. Ser. 1950, No. 9, p. 19.
 - 56. Wld. Hlth. Org. techn. Rep. Ser. 1951, No. 42, p. 4.
 - 57. Wld. Hlth. Org. techn. Rep. Ser. 1951, No. 42, Annex 2.
 - 58. Wld. Hlth. Org. techn. Rep. Ser. 1952, No. 48, p. 16.
 - 59. Wld. Hlth. Org. techn. Rep. Ser. 1954, No. 94, p. 10.